

IN THE CLAIMS

1. (currently amended): A vehicle body structure ~~characterized in that~~ comprising a suspension system and a crush zone for absorbing an impact force in a collision is provided on a front head side of a vehicle relative to a passenger compartment, and the vehicle body structure comprising
a straight portion extending along a vertical direction is formed in a front portion of a at least one vertical beam as a constituent member constituting within the crush zone, the vertical beam having a vertical length $2L$ that is set according to an amount of vertical displacement L during travel of the vehicle,

wherein the vertical displacement L is predetermined by tests or by calculations based on at least one of expected road conditions, a vehicle body rigidity of the vehicle body structure, and a performance of the suspension system.

2. (canceled)

3. (currently amended): The vehicle body structure of claim 1, characterized in that the vertical beam and an inclined beam, together, connect ~~connects~~ a roof frame and an underframe, and ~~an inclined portion~~ the inclined beam is inclined forwardly rearwardly is formed in from an upper portion of the vertical beam ~~, while the straight portion is formed in a lower portion of the vertical beam.~~

4. (original): The vehicle body structure of claim 3, characterized in that a plurality of the vertical beams are provided in a width direction of the vehicle.

5. (currently amended): The vehicle body structure of claim 1, characterized in that the ~~straight portion~~ vertical beam is located at a most forward position.

6. (currently amended): The vehicle body structure of claim 1, characterized in that the vertical beam and an inclined beam, together connect ~~connects~~ a roof frame and an underframe, a bumper is connected to the underframe, and the bumper has a central portion protruding forwardly of the vehicle and has buckling strength changing means provided in opposite side portions.

7. (original): The vehicle body structure of claim 6, characterized in that the opposite side portions of the bumper are weakened relative to the central portion by the buckling strength changing means.

8. (currently amended): ~~The vehicle body structure of claim 7;~~

A vehicle body structure comprising a crush zone for absorbing an impact force in a collision provided on a front head side of a vehicle relative to a passenger compartment, and a straight portion extending along a vertical direction formed in a front portion of a vertical beam as a constituent member constituting the crush zone,

characterized in that the vertical beam connects a roof frame and an underframe, a bumper is connected to the underframe, and the bumper has a central portion protruding forwardly of the vehicle and has buckling strength changing means provided in opposite side portions,

characterized in that the opposite side portions of the bumper are weakened relative to the central portion by the buckling strength changing means, and

characterized in that the buckling strength changing means is comprises holes formed in the bumper.

9. (original): The vehicle body structure of claim 7, characterized in that a reinforcing member is provided in the central portion of the bumper.

10. (currently amended): ~~The vehicle body structure of claim 1,~~

A vehicle body structure comprising a crush zone for absorbing an impact force in a collision provided on a front head side of a vehicle relative to a passenger compartment, and a straight portion extending along a vertical direction formed in a front portion of a vertical beam as a constituent member constituting the crush zone,

characterized in that a cushioning member located behind the constituent member and adapted to buckle by the impact force, thereby relieving the impact force, is provided on one side in a vertical direction of the straight portion, and an auxiliary member is provided for bending the constituent member away from the cushioning member when the impact force is inputted.

11. (original): The vehicle body structure of claim 10, characterized in that the constituent member includes a bumper connected to a lower end portion of the vertical beam, and a beam member constructed between the bumper and a vehicle body, and a front portion of the beam member is bent toward the cushioning member to constitute the auxiliary member.

12. (original): The vehicle body structure of claim 10, characterized in that the constituent member includes a bumper connected to a lower end portion of the vertical beam, a reinforcing member fixed behind the bumper, and a beam member constructed between the bumper and the reinforcing member, and a front portion of the beam member is curved toward the cushioning member to constitute the auxiliary member.

13. (original): The vehicle body structure of claim 10, characterized in that the constituent member is a bumper connected to a lower end portion of the vertical beam, continued from the straight portion, and inclined rearward, and the bumper covers at least part of the cushioning member.

14. (currently amended): The vehicle body structure of claim 1, characterized in that a cushioning member located behind the ~~constituent member~~ vertical beam and adapted to buckle by the impact force, thereby relieving the impact force, is provided on one side in a vertical direction of the ~~straight portion~~ vertical beam , and a protrusion for secondary collision, which is exposed forward, is provided in a front end portion of the cushioning member.

15. (currently amended): ~~The vehicle body structure of claim 1,~~

A vehicle body structure comprising a crush zone for absorbing an impact force in a collision provided on a front head side of a vehicle relative to a passenger compartment, and a straight portion extending along a vertical direction formed in a front portion of a vertical beam as a constituent member constituting the crush zone,

characterized in that a plurality of cushioning members for relieving the impact force by being buckled by the impact force are arranged side by side on right and left sides of the vehicle behind the straight portion, and front end portions of the cushioning members are connected by a connecting member.

16. (original): The vehicle body structure of claim 15, characterized in that the cushioning member includes a buckling portion extending forward from a base end portion attached to a vehicle body, and a crash portion attached to a front end portion of the buckling portion, reinforcing means is provided in a mounting area of the vehicle body and the buckling portion, and a reinforcing member is provided in a connecting area of the buckling portion and the crash portion.

17. (currently amended): The vehicle body structure of claim 1, characterized in that a cushioning member for relieving the impact force by being buckled by the impact force is provided behind the ~~straight portion~~ vertical beam , and a vertical restraining member for inhibiting vertical

displacement, relative to a member to be collided with, in the collision is provided in a front end portion of the cushioning member.

18. (currently amended): ~~The vehicle body structure of claim 17,~~

A vehicle body structure comprising a crush zone for absorbing an impact force in a collision provided on a front head side of a vehicle relative to a passenger compartment, and a straight portion extending along a vertical direction formed in a front portion of a vertical beam as a constituent member constituting the crush zone,

characterized in that a cushioning member for relieving the impact force by being buckled by the impact force is provided behind the straight portion, and a vertical restraining member for inhibiting vertical displacement, relative to a member to be collided with, in the collision is provided in a front end portion of the cushioning member, and

characterized in that the vertical restraining member is constituted by fixing a plurality of horizontal engagement plates at predetermined intervals in a hollow box attached to the front end portion of the cushioning member.

19. (original): The vehicle body structure of claim 18, characterized in that the plurality of engagement plates are fixed to a rear surface of the hollow box, and predetermined gaps are formed between a front surface of the hollow box and the plurality of engagement plates.

20. (original): The vehicle body structure of any one of claims 1 to 19, characterized in that the vehicle is constituted by mounting a plurality of running wheels to a box-shaped vehicle body having the crush zones provided ahead of and behind the passenger compartment, and the vehicle rotationally drives the running wheels while being supplied with an electric power, whereby the vehicle can travel along dedicated tracks.